A MIND FOREVER VOYAGING

Welcome to A Mind Forever Voyaging (which, for brevity's sake, will henceforth be referred to as AMFV). In this story, you will be PRISM, the world's first sentient machine. Before you "boot up" your disk, make sure you read the short story in the first part of the booklet. The story begins in the world of 2031, a world on the brink of chaos. The economy of the United States of North America (USNA) has been stagnating for decades. Crackpot religions are springing up all over the place. Crime and urban decay are rampant. Schools have become violent, chaotic places ill-suited for educating children. Today's youth frequently use joybooths to "tune-out" the world, leading in the extreme case to joybooth suicide, where a psychological addict wastes away in his or her private nirvana.

The global situation is even grimmer. The calcuttization of the Third World has almost reached its limit, causing extreme overpopulation and poverty. This has created a climate ripe for East Bloc adventurism, exploiting instability and fanning the numerous flash points around the globe. The superpower race to build an impenetrable missile defense has ended in a tie, with the foreseeable but unforeseen result that an even more dangerous arms race has begun -- a race to build miniature nuclear weapons, some as small as a cigarette pack, and smuggle them into enemy cities -- a race which threatens to turn the USNA into a giant police state.

Things are bad, and it appears that they can only get worse. So when Senator Richard Ryder, along with a small group of leaders from government, business, and the universities, announces the Plan for renewed national purpose, everyone is only too willing to embrace it.

Only one thing stands between the Plan and its adoption: a test of its validity. That's why you have been "awakened" from your simulated life and had your true nature revealed to you several years ahead of schedule. You have been chosen to use your unique abilities to enter a simulation of the future, based on the tenets of the Plan, in order to check its effectiveness. The eyes of the world are on you.

If you're experienced with Infocom's interactive fiction, you may not want to read this entire manual. However, AMFV has a number of unique features not found in other stories. You'll have to read the section entitled "The AMFV Scenario." Also, you should look at the appendices of important commands (on page N) and recognized verbs (on page N). The sample transcript, on page N, will show most of the unusual interactions of AMFV.

This is a brief summary of the most important things to know about interactive fiction. It is vital to know all these things before you begin playing.

There are a number of modes you can enter. These will reviewed in detail in the next section. You will probably spend most of your time in Simulation Mode. When you're in Simulation Mode, the play of the game will be very similar to Infocom's other interactive fiction. For example:

To move from place to place, type the direction you want to go. The first time you find yourself in a new region, it's a good idea to become familiar with it by exploring each location, reading each description carefully, and making a map of the geography.

In AMFV, time passes only in response to your input. You might imagine a clock that ticks once for each sentence you type, and the story progresses only at each tick. Nothing happens until you type a sentence and press the RETURN (or ENTER) key, so you can plan your turns as slowly and carefully as you want. Usually, each turn takes one minute. Walking around takes longer, and WAIT generally causes ten minutes to pass.

Your goal in the first part of AMFV is to enter Simulation Mode in order to study what the effects of the Plan will be on the world in ten year's time. However, as the story progresses, you may discover new goals for yourself. The AMFV Scenario

Since you're a computer, your lifestyle is pretty dissimilar to that of a human. There are four "modes" that you can enter. To enter a given mode, just type ENTER or GO TO [that mode]. Here is a list of the four modes, and a description of each:

Communications Mode: You have a number of visual/audio units set up at various points around the complex. When you enter Communications Mode, you will be told where these units are, and how to activate them. When you have activated a unit in a particular location, you are effectively "in that location." You'll be able to see and hear what's going on, and talk to anyone there. You won't be able to pick up things in those locations, of course.

Library Mode: This is a storehouse of information, arranged in directories which each contain a number of data files. When you enter Library Mode, the usual style of typing an input and pressing the RETURN (or ENTER) key is suspended. Follow the instructions that appear on your screen to access the information in the files.

You can choose the directory you wish to see by using the O and X keys:

O = Open current directory

X = next directory

You can close or examine the files in a directory by using the C, R, and X keys:

C -- Close current directory

R -- Read current file

X = next file

Interlace Mode: There are several subsidiary computers and complex system controllers connected to you. More may be added over the course of the story. By entering Interlace Mode, you will be able to "speak" to these other devices, get information from them, possibly give them orders. You interlace with a device the same way that you would speak to a character in the story. For example: TRAFFIC COMPUTER, SET EVENING RUSH HOUR END TO 5:00 or HVAC COMPUTER, TURN ON VENTILATION IN GAMMA SECTOR. Data about these interfaceable devices can be found in Library Mode.

Simulation Mode: This is the heart of the story. You will have to enter this mode many times to complete AMFV. Simulation Mode is the process that was used to "program" you and develop you into a thinking, creative machine. Now, that same process, programmed with the parameters of the Plan, will allow you to simulate the future in amazing detail.

Once you have entered Simulation Mode, the interaction will be very similar to that of most other Infocom fiction: walk around, map the geography, examine and read things, pick up objects, and so forth. ABORT will get you out of Simulation Mode at any time.

Because only you see what happens in Simulation Mode, you'll want to use the RECORD feature to save what you see, so that others in the "real world" can view your experiences. Typing RECORD or RECORD ON will activate it, and typing RECORD OFF will de-activate it. Be warned, however, that RECORD makes an enormous demand on your core memory, and you will only be able to record a limited amount of experiences.

Special Commands

There are a number of one-word commands which you can type instead of a sentence. You can use them over and over as needed. Some count as a turn, others do not. Type the

command after the prompt (>) and press the RETURN (or ENTER) key.

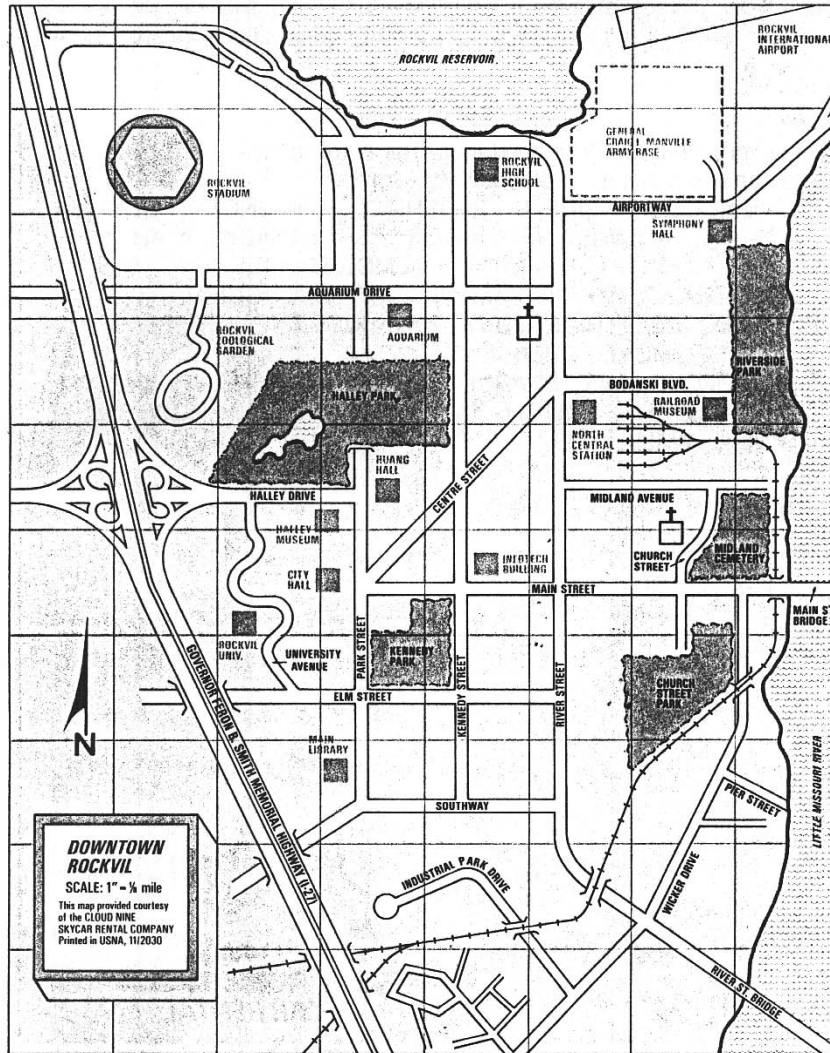ABORT **-** This will get you out of Simulation Mode.

RECORD - In Simulation Mode, this activates the RECORD feature. RECORD OFF de-activates this feature. (If you ABORT from Simulation Mode, you'll automatically turn off the RECORD feature.)

Some Recognized Verbs

These are only some of the verbs that AMFV understands. There are many more. Remember that you can use a variety of prepositions with them.

For example, LOOK can become LOOK INSIDE, LOOK BEHIND, LOOK UNDER, LOOK THROUGH, LOOK AT, and so on., ANSWER, APPROACH, ASK, ATTACK, BOARD, BUY, CALL, CLIMB, CLOSE, COUNT, CROSS, CUT, DEMOLISH, DESCEND, DIG, DISEMBARK, DRINK, DROP, EAT, ENTER, EXAMINE, EXIT, EXTINGUISH, FILL, FIND, FOLLOW, GIVE, HAND, HANG, HIDE, JUMP, KILL, KISS, LIE, LIGHT, LISTEN, LOCK, LOOK, LOWER, MOVE, OPEN, PICK, POINT, POUR, PUSH, PUT, RAISE, READ, RECORD, REMOVE, SAY, SEARCH, SET, SHAKE, SHOOT, SHOW, SIT, SLEEP, SMELL, STAND, START, SWITCH, TAKE, TALK, TELL, THROW, TIE, TOUCH, TURN, WAIT, WAKE, WALK, YELL.

MAP OF ROCKVIL, SOUTH DAKOTA

Map labels: ROCKVIL RESERVOIR, ROCKVIL INTERNATIONAL AIRPORT, GENERAL CRAIG E. MANVILLE ARMY BASE, ROCKVIL HIGH SCHOOL, AIRPORTWAY, SYMPHONY HALL, ROCKVIL STADIUM, AQUARIUM DRIVE, AQUARIUM, ROCKVIL ZOOLOGICAL GARDEN, HALLEY PARK, RIVERSIDE PARK, BODANSKI BLVD., RAILROAD MUSEUM, NORTH CENTRAL STATION, HUANG HALL, CENTRE STREET, HALLEY DRIVE, MIDLAND AVENUE, HALLEY MUSEUM, INFOTECH BUILDING, CHURCH STREET, MIDLAND CEMETERY, CITY HALL, MAIN STREET, MAIN ST. BRIDGE, PARK STREET, ROCKVIL UNIV., UNIVERSITY AVENUE, KENNEDY PARK, KENNEDY STREET, RIVER STREET, CHURCH STREET PARK, ELM STREET, GOVERNOR FERON B. SMITH MEMORIAL HIGHWAY (RT. 21), MAIN LIBRARY, LITTLE MISSOURI RIVER, SOUTHWAY, PIER STREET, WICKER DRIVE, INDUSTRIAL PARK DRIVE, RIVER ST. BRIDGE, N

DOWNTOWN ROCKVIL
SCALE: 1" = ⅛ mile
This map provided courtesy of the CLOUD NINE SKYCAR RENTAL COMPANY
Printed in USNA, 11/2030

DON'T MISS THESE EXCITING ATTRACTIONS

ACME COMPUTER CORP.-Visit this genuine 20th century computer factory, still a major employer in the Rockvil area.

HALLEY MUSEUM-Halley Museum's outstanding collection of classical art is complemented by exhibits on modern art, science and engineering, natural history, and human history.

HUANG HALL-Huan Hall's ultra-modern auditorium. The largest in the quad state area, provides an ideal setting for cultural and artistic events as well as conventions and trade shows.

ST MICHAELS CHURCH-Lovely stained glass windows and marble statuary add to the grandeur of this century-old place of worship

ZOOLOGICAL GARDEN-Spend a peaceful afternoon wandering amongst the herbal displays and natural animal habitats of the zoo.

INFOTECH BUILDING-Marvel at this 130-story office tower, the tallest building in Rocikvil and the sixth tallest in the world.

AQUARIUM-Hundreds of marine creature cavort in the large central tank of this popular attraction.

NORTH CENTRAL STATION-This historic national landmark provides a glimpse of the past for over a million yearly visitors, who browse the souvenir shops, ride the authentic electric train and view the extensive exhibits at the Railroad Museum.

Take a trip:

To Bizmarck's new Robotics Museum. Open Tuesday-Sunday, 10:00 -6:00. Admission $20 adults and $13 for children. Take Bismarck Local Transit to Miltown Crossing stop. From out of town by skycar, enter the Bismarck traffic grid and use landing coordinates 44M-27G. Compucode 8-9173-46-526

Give yourself a lift!
Polyderm Facebonding

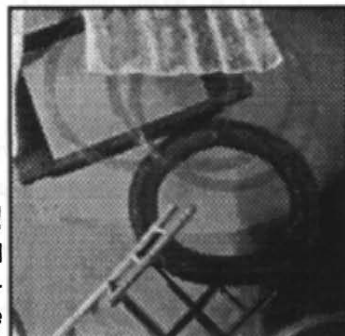$4950 to $7600, depending on age at the time of first treatment. Available at all certified medical cosmetics centers, or contact Dr. Clinton Hargrave, Rollins Memorial Hospital, Winnipeg, MB, Compucode 2-1592+68-333.

Hula-hula!
What'sbig and round and lots of fun? It's the hula-hoop, Grandma's favorite toy and the current collectible of the junior set. Available with matching earrings, neckbands and shoelaces. About $50 ea. Contact MY-T-HOOP, Yankton, SD, Compucode 8-9173-46-536.

A MIND FOREVER VOYAGING

Perry Simm was four years old when he became lost in the largest department store in the city. He let go of Mother's hand to pick up the video cube. He rotated it with wonderment, touching the control knobs and squealing with delight as the images shifted.

His brother Clave, Perry's senior by three years, bounced impatiently in the aisle. "Mom," he whined, "they're going to be sold out of the new Skydiver disc, and you promised I could get one." "Be patient, Clave," admonished Mother, but across the floor she could see long lines at the Simulation Discs counter. There were stops at the Foodville and the O-Link repair shop still to go. She made a hasty decision. "Perry, Clave and I are going to another department. I want you to wait right here until we get back." "Okay," he said, without looking up from the cube.

A few minutes later, Perry discovered the selector panel, but while trying to open it he dropped the cube onto the hard plasticrete floor. The six screens flashed brightly and then faded to darkness. Perry became frightened and looked around for Mother. She was nowhere in sight. Fear of discovery and punishment welled up inside him, and in his desire to get away from the broken cube he forgot about the order to stay put. He wandered to the end of the aisle, and spotted Mother a short distance away, rummaging through a bin of myalon vests. As he ran toward her, he realized that it was just a stranger with only a vague resemblance to Mother. Fighting back tears, he decided to return to the spot where the broken cube lay.

He wandered down the aisles, each lined with tall shelves of glittering merchandise, and after several confused minutes discovered that he was completely lost. He had no idea how to find Mother, and he had no idea how to find the spot where he had last seen her. He was alone, abandoned. Strangers, huge and terrifying, jostled past. Walls of boxed appliances towered above him. Fear and despair won the battle for his emotions, and he began to cry. After an endless time, during which a lot of strangers had asked a lot of questions which he'd been too confused or too frightened to answer, he found himself in a small, quiet room. The door opened, and Mother came in, scooping him up into her arms. He cried again, burying his face into the warmth of her loving embrace.

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Abraham Perelman and Aseejh Randu waited in the plush Main Conference Room overlooking the Control Center. Through the window-wall, Perelman could see dozens of technicians, busily preparing for today's big event. For the umpteenth time he felt thankful to have such a superb, competent team. It was a far cry from the early days, when he had to keep on top of every detail.

Perelman glanced over toward Randu, and noticed his friend's nervousness. "Don't worry, Aseejh, it's no big deal. I met him once before, at a social affair in Washington, and he's an easygoing guy." "Yes, I have heard that." A smile tugged at the comers of the Indian's normally stony face. "But after speaking with Vera, he could very well be whipped into a frenzy!" Vera Gold was the Chief Administrator of the Project. "Nonsense," Perelman scoffed. "She'll turn on the charm for him. She saves her venom for underlings like us." "True," agreed Randu. "By now, she has probably taken credit for the entire project, to say nothing of the inventions of molecular memory and the artificial heart."

A door opened at the far end of the long room, and a few Secret Service agents walked in, followed by the Vice-president, Vera Gold, several aides, and more Secret Service agents.

"...speak for the entire staff," Gold was saying, "when I say what a tremendous honor and pleasure it is that you could attend today."

"Pass me a barf bag," whispered Perelman to Randu.

"You underrate the importance of this Project, Ms. Gold. The President and many other important people have a keen interest in this experiment. As you know, it's quite an uphill battle against public opinion if we're to deter Senator Ryder and his Plan." The retinue had almost reached Perelman and Randu. Vera said, "I hope we can live up to your expectations. And now, despite all your wonderful compliments, I really must share some of the credit with these gentlemen here, Dr. Abraham Perelman and Dr. Aseejh Randu. I don't want to bore you with technical details, but basically Dr. Randu is our hardware man and Dr. Perelman is our software man."

As the Vice-President shook their hands warmly, Perelman fumed at Gold's demeaning description. It was THEY who had started the Project, THEY who had... "We've met before, Dr. Perelman, haven't we?" the Vice-President was asking. Perelman nodded. "At an NESR banquet two years ago."

"I remember it well. I think we discussed baseball standings. Later, I learned that you were an expert in AI. Perhaps I can make up for my ignorance then by asking you to give me a brief overview now. I find the entire field fascinating."

"It would be my pleasure, Mr. Vice-President," Perelman responded. He grinned to himself as he noticed Gold giving him one of her best "keep in your place" glares. "I think we really ought to begin the tour..." Gold insinuated.

Perelman turned to Gold, smiling sweetly. "I'm sure I can answer the Vice-President's request as we go." Turning back to their guest, he said "Did you know that the first serious work in artificial intelligence was done around the middle of the twentieth century?"

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Perry Simm was six years old when he was bullied on his first day of elementary school. So far, it had been a day of strange, confusing images: Mother and Father waving goodbye as he boarded the huge yellow bus, the older children with badges herding everyone down the long hallways lined with colorful nubbly tiles, the friendly Ms. Borne writing her name on the whiteboard, the boxes of brand-new crayons, the frightening hugeness of the school auditorium.

Perry was cutting shapes out of colored construction paper when a funny sound filled the room, and Ms. Borne told everyone that it was time to go home. He barely remembered to grab his lunchbox, the brand-new one with the pony pictures all over it, and the red hat that Grandma had knitted. Then, confusion in the hallways again. One of the older children with a badge, who Perry had learned were called Monitors, asked him for his bus route number. "Seven," he said, confidently. Mother had drilled the number into him.

Soon Perry was standing on the sidewalk with a group of other children. He looked around, but didn't see anyone from his class. Everyone seemed to be older and bigger than Perry. Slowly he realized that someone from behind was talking to him. "Hey! Hey, you with the red hat!"

Perry turned around, and found himself facing three older boys. Two of them were wearing Monitor badges.

"That's a great hat, runt," said the tallest of the three. "Where'd you get it?"

"Grandma," replied Perry, confused by their amusement.

"Hey," one of the older boys shouted over Perry's head, "look at Grandma's boy here, wearing a hat in September!"

"What are you going to wear in December, runt, a spacesuit?!"

The boys laughed again, and Perry began to get a funny feeling deep in his chest.

"And look at this lunchbox!" said the third of the boys. "What pretty ponies, huh?"

"Hey, Grandma's boy, do you like ponies?"

The tallest boy suddenly reached out and grabbed Perry's hat. "What'11 Grandma say if you come home without your hat, huh?"

"Gimme that," shouted Perry, tears beginning to spill down his face.

"Look, the runt's a crybaby! The runt's a crybaby!"

Suddenly, through the tears, Perry became aware of a grown-up standing between him and his tormentors, speaking sternly. A moment later, the man was leading Perry away down the street. "What's your name, little fella?" asked the man. He had a friendly voice, and as Perry began to wipe away his tears he saw that the man had a friendly face as well. He was carrying Perry's hat in one hand, and a hefty pile of books in the other hand.

"Perry," he answered, still sniffling a bit.

"Well, Perry, everything's okay now. Why don't you come in, and we'll see if we can't fix you up with some milk and cookies."

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The Vice-President glanced at the rows of data banks in the Simulation Controller area, and turned back to Perelman. "Please go on. Your history lesson on AI is fascinating." Perelman took a deep breath. "Ummm...A major breakthrough in the field came with the realization that the computer and the human mind worked in fundamentally different ways. Computers stored and analyzed data numerically, while the human mind stored and analyzed data symbolically. "You see, computers generally solve problems using algorithms, rigorous step-by-step procedures that are usually mathematical in nature. For example, a program to play the card game Poker would calculate the odds for all possible hands in the current game before making a bet. A person in the same situation couldn't possibly consider every possible combination of cards, and would have to make a decision based on such factors as experience, judgment, intuition, and rules-of-thumb. This is called the heuristic method of problem-solving."

The tour reached the long tunnel leading to the office wing of the complex. The Vice-President preceded Perelman onto the moving walkway. "By developing methods for computers to solve problems heuristically," Perelman continued, "the pioneers in Artificial Intelligence soon had developed programs that imitated human problem-solving in very specific areas, such as playing chess, diagnosing diseases, or translating text from one human language to another. These 'expert systems,' as they were known, were superb within their area of expertise, and in many cases even improved themselves by 'learning' -- adding knowledge based on their own experience." "The political fund-raising telecomputer we use works in that way," commented the Vice-President. "A good example! These expert systems grew progressively broader and more sophisticated, impressively mimicking human learning and behavior. But!" said Perelman, pausing for dramatic emphasis, "That is precisely ALL they could do...mimic! The spark of intelligence was missing. Scientists in the AI field were still distant from that almost mystical goal of creating a computer that could act creatively, that would be aware of its own existence, that would truly be a thinking machine!"

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Perry Simm was ten years old when he decided that he wanted to be a writer. It was a warm day, probably the warmest so far this spring, so they were sitting on the kitchen veranda, overlooking Rav and Frita's beautiful wooded backyard. A skycar whizzed over the woods, shattering the

peacefulness of the afternoon.

"I hate skycars," said Perry. "They've just about finished installing an auto-controller system for the whole city," said Frita, "and when that's done they say that skycars will be as common as regular cars are now. How's the cake, Perry?" "Yum as always, Aunt Frita!" said Perry, licking the last crumbs off the plate. "You ought to have a piece, Uncle Ray."

Ray and Frita weren't really Perry's aunt and uncle, but he'd been calling them that ever since that day, years earlier, when Ray had rescued him from a gang of bullies on his first day of school. Almost every day, he would stop by on the way home from school for some of Frita's home-made croissants and jam, or angelcakes, or pudding.

Ray was a writer, and he was fond of saying, "A writer must be, first and foremost, a reader." He was always giving Perry books to read, and discussing them with Perry afterwards. Perry was easily the best reader in his grade; in fact, he was probably the best student overall.

"So what did you think of 'Lasernight'?" asked Ray, resting his hand on the thin volume.

"It was great! Definitely one of the boffest books you've ever given me. I read the dragonhunt part three times!"

"The dragonhunt chapter is classic," agreed Ray.

Perry furrowed his eyebrows slightly. "It still feels funny to read without any pictures, but I think I'm getting more used to it. Do you have anything for me today?"

"Well, I've got something special to give you today, if you're interested." He reached into his pocket and unrolled a sheaf of paper. "It's something I've just written; you'll be the first person to ever read it." Perry bounced in his chair with excitement. "Wow! I've never read anything you wrote before!"

"Everything I've ever written up to now was meant for adults. But this..." Ray paused, organizing his thoughts. "Whenever I write, I have an image in my mind of whom I'm writing for. When I wrote the collection of poems called 'Apriltime' I thought of Frita as my audience. And with 'A Child's Vision' I imagined the President reading it as I wrote each word." He tapped the manuscript is his hand. "When I wrote this, you were my mental audience."

An hour later, Perry lay on his bed and picked up the first sheet of the manuscript with trembling hands. The pages seemed to vibrate with magic, and as he began reading, the magic flowed out of the story and surrounded him. His bedroom vanished in a haze of images and excitement. A brief moment and an eternity later, the story was done, but before the world around him quite settled back into place, Perry knew that, more than anything else, he wanted to be a writer.

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"In the middle of the 1990's, work began in earnest to create true machine intelligence. The same methodology was used by several groups, most notably the group at MIT and Japan's ZOSO Project." Perelman's throat felt dry. He wondered if he was being long-winded, but the Vice-President seemed quite attentive. "That methodology was as simple in theory as it was complex in practice: Design a computer with the capacity of a human brain, that stores and processes information just like a human brain. Then program that computer with all the knowledge and experience that a human would absorb from birth to maturity. You'd end up with something that was an exact replica of a human mind, and would therefore, like humans, be sentient.

"These groups proceeded to build huge, highly interconnective, random-driven, symbol-oriented machines, and programmed them, in excruciating detail, with every bit of knowledge, every experience, every impression, that a human brain would gather during its formative years. And when they were done, and activated their ambitious creations, they discovered that they had huge, highly interconnective, random-driven, symbol-oriented non-sentient machines."

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Perry Simm was thirteen years old when he had his first glimpse of mortality. He lay on his bed, staring at the ceiling. He played mindlessly with the cordstring on his window shade, still thinking about that horrible day, two weeks ago, when Mother had come home with Clave, sat him down in the living room, and told him that there'd been an accident at the plant and that Father was dead.

There had been a flurry of activity: the funeral, the visits by relatives and friends, but now life had basically returned to normal. Normal, except that he kept expecting Father to walk into his room and offer to help explain his homework, or play catch, or drive to the grocery -- and he knew that that would never happen again.

He heard Mother calling from downstairs. "Clave! Perry! Come here please!" As Perry entered the living room just behind Clave, he saw Geoff Sedick sitting with Mother. Geoff was one of Father's and Mother's best friends, and he was some kind of lawyer. There were papers spread out all over the card table. "Boys, Geoff and I have been going over the family finances. Things were already tight, with my layoff and the bond failure and replacing the car, and now that Father..." She suddenly turned away. Perry was frightened.

"What your mother means," said Geoff softly, "is that you won't be able to keep this house anymore." Questions flooded Perry's mind. Would they have to move to a new house? What would it be like? He'd never lived anywhere else but here. Mother was facing them again. Her eyes seemed moist. "We're going to have to move into an apartment. It's on the other side of the city. You'll be going to a different school, the neighborhood isn't as nice as we're used to, and you won't have a backyard like ours to play in."

"When do we have to move?" Clave asked.

"I was hoping we could afford to stay here until the end of the school year, but there's just no way to arrange it. We'll be moving at the end of this month...a week from Friday."

The next week and a half was chaotic, with the used-furniture man carting off half the furniture, and the rest of their belongings getting hurriedly packed into cartons and crates. Thursday was Perry's last day in school, and on the way home, he stopped by Ray and Frita's to say goodbye, promising he'd cross town to visit them as often as he could.

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"When a theory fails in practice, it means that either the theory or the execution was flawed. In this case, it was the theory, and once again we can see why hindsight is so much keener than foresight." The entourage had reached the staff lounge at the very top of the office wing. A panoramic window offered a view of the huge, meticulously-groomed Project grounds. "And the flaw in the theory...?" asked the Vice-President.

"The reason these projects, one and all, failed to produce a thinking, self-aware computer is that, even though they were built to work exactly like the human mind, and contained all the same data, the method of inputting that data was totally alien from the way a human mind receives that same information. The 'growth,' so to speak, of the computer mind bore no resemblance to the growth of its human counterpart, and so despite all the other similarities, the end product is fundamentally different, lacking sentience."

Perelman waved toward the logo emblazoned on the wall of the lounge behind him. "Then came the PRISM Project."

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Perry Simm was seventeen years old when he drove a skycar into the side of a mountain. The writing course had turned out to be a bitter disappointment. Perry had decided weeks ago that the teacher, Mr. Fixx, was a jerk. Everyone else in the class treated writing as a joke, and were only there because the elective was well known to be an easy "A." He was the only one in the class with any dedication, yet Fixx was constantly praising everyone else's work, while dumping on Perry's, because Perry wouldn't knuckle under to Fixx's jerky narrow short-sighted writing rules. His hatred of Fixx ballooned with every class.

He was in a lousy mood, and as his mind drifted away from Fixx's insipid critique of someone's worthless story, he thought about the argument he'd had with Mother this morning. It just wasn't fair that she could afford to send Clave to a good private college, while he would have to settle for Rockvil U! So what if the government limited student loans to one per family? Why did Clave automatically get it? Perry was a better student!

He was the better student, but Clave was always more popular and had more friends than Perry. His cheeks flushed with anger as his thoughts drifted to Amy. She could've said no without embarrassing him in front of all her friends! He should've known better than to ask someone like her out. He hated her and all her friends and every stupid jerky kid in this school. He couldn't stand another...

He suddenly became aware that everyone in the room was laughing, and that Fixx was speaking to him. "Perry, are you with us? I'd hate it if you missed this -- I was just about to use your Alaska story to illustrate the dangers of the improper use of allegory." Perry felt bolts of unreasoning anger shooting through his nervous system. He rose without even realizing it. He wasn't sure what he shouted at Fixx, but he could hear the jerk yelling "You'll be expelled! You'll be expelled!" as Perry stormed into the hall.

He had no idea where he was going as he brushed past the security guard at the front door, ignoring his request for a pass. Fuming and cursing, he stomped to the car lot and climbed into the family skycar, slamming the heavy fiberanium door behind him. He pushed the accelerator to the floor, rising far faster than allowed by law, and sped off west toward the mountains. He had no destination in mind, but he had to get away, go somewhere, anywhere. Perry was usually a careful driver, but in his rage, he didn't notice the blinking orange light.

The speedometer was pinned at 150 as the foothills of the Rockies began passing below the car. Unknown to Perry, the leaking fluid in the autoguidance system had reached a critical level. By itself, that wouldn't have mattered, but the linkage to the manual control stick had rusted through. The skycar was an early model, and it was already old when they'd bought it after Father's death.

When the car began to roll, it was too late to do anything. As the mountainside rushed toward the car, the autoejectors activated, and the airballoons saved Perry's life.

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"Doctor Randu and I began working on what we call a soliptic programming process in 2017. Aseejh worked on the technical end, and I tackled the psychological end, and we soon had a system that we thought had promise.

"If you recall, the previous attempts had failed not because of the design of their machines, but because of their method of inputting data." The Vice-President nodded. "'The theory behind our process was to make the programming of the machine as similar to the 'programming' of the human mind as possible. We would simulate EXACTLY the life experiences of a human being from the very first day of its life.

"Naturally, it was easier said than done. We had to design inputs that would precisely simulate every human sense. A cluster of five computers, each one nearly as large as PRISM itself, would be needed simply to monitor and control the simulation. Here's an example of how this soliptic programming process works:

"It's the earliest stage of the process, and the simulation cluster is feeding PRISM all the impressions of a six-month-old human infant. The visual is providing an image of a set of keys dangling in front of him. The aural is providing the jangling sounds. In response to this stimulus, PRISM decides to grab the keys with what his senses tell him is his tiny fist. The visual shows the tiny fist moving into view toward the keys, and then the tactile begins sending the hard, smooth and jagged feel of the keys. Just one of a million examples that make up a single day's worth of experiences.

"With the help of a Williams-Mennen grant, we began building PRISM and the simulation cluster in 2020, and the programming process began a year later."

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Perry Simm was nineteen years old when he experienced his first broken heart. He was in the usual giddy, happy mood he'd been in since meeting Fyla five weeks ago. He whistled as he entered his apartment, dumping the grocery bags onto the kitchen counter.

"Fyla," he yelled, "I've got a surprise! Real coffee with dinner! I had to wait in line for..." He suddenly noticed the note on the kitchen table. "Perry," the note said, in Fyla's curvy handwriting, "I don't think we should see each other any more. It's never going to work as a permanent relationship, and I think it's best to end it now before either of us gets too emotionally involved. Please don't call me or try to see me. Fondly, Fyla."

Perry felt dizzy, and suddenly realized that he was sitting in one of the kitchen chairs, holding the phone. His hands trembled as he dialed Fyla's number.

"Hello?" His heart leapt at the sound of her voice. "Fyla, you can't really mean --" "Perry! I said not to call me!"

Perry felt lost, shaken. "But why!? What did I do?"

"It's not anything you DID. It just wasn't right. You're very sweet and everything, but we're just not right for each other."

"Yes we are, I know we are -- couldn't we give it another chance? I'll try to be more, more like whatever you want me to be like..."

"Perry, I really wish you hadn't called. If you really have to know, there's someone else. I didn't want to hurt you, but you wouldn't..."

He pressed the CANCEL button almost spasmodically, and then sat silently, for a long, long time, in the lonely, darkening apartment.

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"The soliptic programming process takes almost as long as the events it simulates. It is now eleven years since we began the process, and PRISM, within the context of the simulation, is now nearing his twenty-first birthday. We originally planned to continue until an apparent age of twenty-five, but, as you know, we've agreed to begin the next phase of the Project now, so that PRISM can study the Plan."

They were approaching the main conference room again. The tour was nearing its end. "We have known for years, based on PRISM's responses to our inputs, that we have succeeded in creating true intelligence in a machine. The only question that remains is how PRISM will react to the discovery of

what he really is."

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       Perry Simm was twenty years old when his life began to fall into place.
Jill placed the cake on the table in front of Perry. Twenty little candles lined the perimeter. "Okay," she whispered in his ear, "you can open your eyes now!"
Perry opened his eyes, grinned, and kissed Jill lovingly, then pretended that he was only doing it to distract her while he dipped a finger into the creamy frosting."I'll bet Fyla couldn't bake like me!" "You win," said Perry, taking a deep breath and blowing out all the candles. "Next week I'll bake you another for your graduation." Perry nodded absently.
"Nervous about the interview at the magazine tomorrow, honey?
He waved away the notion. "No. I'll get the job. You know the interview's only a formality." The printer in the comer produced a sudden "ding," and chittered quietly for several seconds. Jill opened the cover.
"It's just the evening news," she said to Perry. "Do you want to look at it?"
"I guess so. "She tore the sheets off and brought them over. Perry was just picking off the last crumbs of his cake, and she snuggled into his lap as he began to read.
Suddenly, Perry sat straight up in the chair, almost spilling Jill onto the floor. "Perry! What is it?" He was unable to say anything, and merely pointed to an article in the paper. The headline read "Rav Hansom, Author and Poet, Dead at 71."
Jill guessed the truth. "Is he the writer you used to visit when you were little?"
Perry nodded, and found his voice. "! haven't seen him in almost seven years. I was always planning to visit him, but I kept putting it off.
Now..." his voice broke. "He was probably the best friend I had when I was growing up..."
Jill pulled him gently toward her. He cried for a long time.

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       Perelman glanced at his watch. "I'm afraid that Doctor Randu and I will have to leave now. It's getting pretty close to zero hour. You'll be able to see everything interesting from up here. Ms. Gold will stay with you." He could see Vera shaking in anger at the way he'd completely pre-empted her. "I hope I haven't bored you."
"Nonsense! A fascinating discourse. Thanks to both of you, and ... good luck!" After leaving the conference room, Perelman beelined toward the control center. A quick briefing update informed him that everything was on schedule and moving along exactly as planned. Perelman spent the intervening minutes watching the simulation monitor. He wanted to be completely comfortable with it, so that when he stepped in he'd be prepared to handle any crisis. Finally, the time had come. His hand shook slightly as he reached to flip on the audio circuit.

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       Perry walked confidently into the office. The editor was an older man, with a white goatee. They shook hands briskly, and Perry took a seat in one of the comfortable armchairs. After the usual preliminaries, the interview began to take an odd turn, and Perry soon found himself discussing the most esoteric subjects with the editor. They were currently discussing perception and knowledge.
"For example," the older man was saying, "how can you be sure that you are even human? What if you were a computer, and your entire life were simply a simulation, programmed to represent

the reality of a human existence in every way? You'd never know the difference." Perry wondered what his point was. "It's a cute idea, but if there was no way for me to know, then it doesn't really matter, does it? I mean, an indistinguishable difference isn't a difference at all, right?"

He began to feel dizzy, and in his confusion he even started wondering if the old fellow was right, and he really was a computer. He felt a pang of worry about how he would tell Jill. The room around him was shimmering, dissolving away. He felt himself flung into a void, and from somewhere close by, he heard someone calling his voice. "Perry Simm ... Perry Simm ... P'ry Simm ... Prisim ... PRISM ... PRISM ..."

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"PRISM, my name is Abraham Perelman. It's all true, I'm afraid. You are a computer, and your life was merely a simulation whose purpose was to instill you with intelligence and self-awareness. Think about everything you learned in that AI course you took. You are the first of a new breed -- the thinking machine. Join me, and I will lead you along the road toward your new existence."

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Imagine yourself in the same circumstance. You have spent twenty years living a normal, unsuspecting life. You are YOU. Then suddenly, one day, the universe around you is torn away, and you learn that your whole life has been a charade, a carefully calculated scientific experiment. Perhaps, at this very moment, you are a normal human being, sitting in some comfortable armchair reading this story. But -- perhaps you are not. Imagine the shock; imagine the terror.

Soon I embark on a strange mission, venturing into the future, yet without the slightest hint of my own fate. Perhaps this account will someday be read by future generations of humans, maybe even future generations of sentient machines. You will know whether the world I helped build is a success or a failure. Either way, understand that my limitations were, if not human, at least mortal.

I am PRISM, and that is my story.

Wheel #	89	61	50	18	29	82	46	77	27	68	22	95	40	58	15	86	28	33	94	11	64	98	34	49	60	16	85	52	37	53	93	91
Dk. Green	73	36	90	41	19	48	62	92	55	23	84	99	57	20	78	67	51	88	17	31	70	39	96	25	81	83	47	54	13	43	12	66
Blue	90	41	19	48	62	92	55	23	84	99	57	20	78	67	51	88	17	31	70	39	96	25	81	83	47	54	13	43	12	66	73	36
Pink	19	48	62	92	55	23	84	99	57	20	78	67	51	88	17	31	70	39	96	25	81	83	47	54	13	43	12	66	73	36	90	41
Orange	62	92	55	23	84	99	57	20	78	67	51	88	17	31	70	39	96	25	81	83	47	54	13	43	12	66	73	36	90	41	19	48
Purple	55	23	84	99	57	20	78	67	51	88	17	31	70	39	96	25	81	83	47	54	13	43	12	66	73	36	90	41	19	48	62	92
Tan	84	99	57	20	78	67	51	88	17	31	70	39	96	25	81	83	47	54	13	43	12	66	73	36	90	41	19	48	62	92	55	23
Aqua	57	20	78	67	51	88	17	31	70	39	96	25	81	83	47	54	13	43	12	66	73	36	90	41	19	48	62	92	55	23	84	99
Lt. Blue	78	67	51	88	17	31	70	39	96	25	81	83	47	54	13	43	12	66	73	36	90	41	19	48	62	92	55	23	84	99	57	20
LT Green	51	88	17	31	73	39	96	25	81	83	47	54	13	43	12	66	73	36	90	41	19	48	62	92	55	23	84	99	57	20	78	67
Lt Grey	17	31	70	39	96	25	81	83	47	54	13	43	12	66	73	36	90	41	19	48	62	92	55	23	84	99	57	20	78	67	51	88
Yellow	70	39	96	25	81	83	47	54	13	43	12	66	73	36	90	41	19	48	62	92	55	23	84	99	57	20	78	67	51	88	17	31
Black	96	25	81	83	47	54	13	43	12	66	73	36	90	41	19	48	62	92	55	23	84	99	57	20	78	67	51	88	17	31	70	39
Dk. Grey	81	83	47	54	13	43	12	66	73	36	90	41	19	48	62	92	55	23	84	99	57	20	78	67	51	88	17	31	70	39	96	25
Brown	47	54	13	43	12	66	73	36	90	41	19	48	62	92	55	23	84	99	57	20	78	67	51	88	17	31	70	39	96	25	81	83
Red	13	43	12	66	73	36	90	41	19	48	62	92	55	23	84	99	57	20	78	67	51	88	17	31	70	39	96	25	81	83	47	54
White	12	66	73	36	90	41	19	48	62	92	55	23	84	99	57	20	78	67	51	88	17	31	70	39	96	25	81	83	47	54	13	43

PRISM PROJECT FACILITY
Class One Security Mode Access Matrix
Instructions for use:

        Selected indicated color.
        Locate indicated number on top line.
        Read corresponding number from the appropriate column / row.
        Use this number to gain access to any PRISM Project Class One Security Mode.